

REMARKS

This paper is responsive to the nonfinal Office Action dated December 12, 2007, relating to the above-identified application.

1. Objection to Drawings under 37 C.F.R. § 1.83(a)

The Examiner noted that FIG. 9 does not show element 901 and that FIG. 11 does not show element 1104. The Examiner also noted that element 1101 is not described in the text of the disclosure. What is shown as element 1101 is in fact element 1104. Applicant has amended FIG. 11 to correct this clerical mistake. No new matter is added by way of this amendment. Applicant has also amended FIG. 9 to illustrate element 901 next to the two arrows at the bottom the drawing. No new matter is added by way of this amendment. Applicant respectfully requests that the Examiner withdraw the rejection of the figures and accept the amended figures in the application.

2. Informal Objections

The Examiner objects to the preamble of claims 4, 6, 8, 11, 17, and 20, explaining that a claim listing both a fluid collector and a fluid collection device should be the parts of a kit. Applicant respectfully disagrees and traverses this objection. Claims 8, 11, and 20 are already directed to a kit, and claims 4 and 6 are given support as a fluid collection device 900 at para. [0044]:

With reference now to FIGS. 9 and 10, the illustrated fluid collection device 900 includes two gangs 901, 901, each comprising a fluid collector 903, 904 that is disposed between a superstrate sheet 905 and a substrate sheet 906 and that is generally fixed with respect to the superstrate sheet 905.

There is nothing wrong with claiming a fluid collector, then a fluid collection device, and finally a kit with the collector or the collection device. Because Applicant has cancelled claims 16–19, the objection directed to claim 17 is rendered moot. Claims 4 and 6 have been amended to include the limitations and elements of the claims from which these claims were associated. Claims 8, 11, and 13 have been amended to depend from new claim 42, which is directed to a kit comprising the subject matter of claim 4. Applicant has also amended claims 9–10, 12, and 14–15 to make grammatical corrections. No new matter was added by way of these amendments. Withdrawal of this informal objection is solicited.

3. Rejection under 35 U.S.C. § 112 Second Paragraph

Applicant does not fully understand the Examiner's rejection. From the Office Action, it appears the Examiner wants the Applicant to use the term "layer" to claim coats of saccharide and polyvinyl alcohol, respectively, on the substrate. What is claimed is broader than two consecutive layers. Glass fibers forming a mat, which in turn forms a substrate, are coated with alcohol. This coating can be done at many different steps during the process of weaving and/or constructing a mat. For example, prewoven fibers can be dipped in alcohol before they are woven and/or constructed into a mat. The claim as written contemplates a coating of the right elements. The Examiner's proposed construction is unduly restrictive and creates ambiguity as to when the coating is applied. Applicant's construction is more precise and does not fail to particularly point out and distinctively claim the subject matter. If the

Examiner maintains this rejection, Applicant asks that the Examiner specify what subject matter is not particularly pointed out. The term “coating” is fully defined and enabled. Applicant respectfully traverses the rejection and asks for withdrawal of the rejection.

4. Rejection under 35 U.S.C. § 103(a)

Claims 1–21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,014,438 (“Quattrocchi”) in view of U.S. Patent No. 6,528,321 (“Fitzgerald”). Incidentally, Quattrocchi is owned by Applicant, so Applicant is well versed in this different technology. The Examiner argues that two pages of the Quattrocchi disclosure (cols. 5–8) teach all of the structural elements aside from the glass fiber substrate with dual coating of xylose and polyvinyl alcohol, which is shown on one page of Fitzgerald (cols. 17–18). Applicant respectfully disagrees. The Quattrocchi device is structurally different in many aspects from the device at hand.

The Examiner also determines, at a minimum, that Quattrocchi does not disclose a mat of glass fibers coated with both saccharide and polyvinyl alcohol (sentence 1, p. 8 of 12/12/07 Office Action). The Examiner concludes that a glass fiber coated with both xylose and polyvinyl alcohol is disclosed in the secondary reference. While the terms “xylose” and “polyvinyl alcohol” can both be found in the Fitzgerald disclosure, the use of both of these coatings simultaneously on a substrate is not described.

A first portion of the specification discloses impregnating a matrix with a carbohydrate (col. 18, ll. 38–46). A second portion of the specification discloses

impregnating part of a second matrix with polyvinyl alcohol. A careful review of the specification is needed to understand that Fitzgerald in fact teaches away from placing both a carbohydrate and polyvinyl alcohol on the same substrate.

The term “polyvinyl alcohol” is used only once in Fitzgerald at col. 19, l. 11:

Asymmetric membranes suitable for inclusion in a sample application zone of an assay device according to the present invention can be prepared from combinations of hydrophobic and hydrophilic polymers, such as disclosed in U.S. Pat. No. 5,240,862 to Koenhen et al. and U.S. Pat. No. 5,076,925 to Roesink et al. The hydrophobic polymer can be polysulfone, polyether sulfone, polyimide, or polyetherimide, and the hydrophilic polymer can be polyvinyl pyrrolidone, polyacrylic acid, polyvinyl alcohol, polyvinyl acetate, or polyethylene glycol. (emphasis added)

What is described is an asymmetric membrane, i.e., a membrane having a first side with a first coating, and a reverse side with a second coating. On the first side is placed a hydrophobic polymer (i.e., a polymer that repels water), and on the reverse side is place a hydrophilic polymer (i.e., a polymer that binds with water). The obvious effect of such a membrane is to draw water away to the reverse side of the membrane. The Fitzgerald specification is clear: the asymmetric membrane **must** remain untreated before the two coatings are placed (col. 18, l. 61) (emphasis added). Fitzgerald discloses in part of the specification glass fiber with a carbohydrate (col. 17, l. 44 to col. 18, l. 49), and in another part of the specification, a matrix with a polyvinyl alcohol on one side of a membrane as “another alternative” (col. 18, l. 60).

The Fitzgerald specification teaches away from a membrane or a matrix with both of Applicant’s suggested coatings. In fact, the specification is clear

that for the polyvinyl alcohol to work, it must (a) be on the reverse side of a hydrophobic polymer coating, and (b) the matrix cannot be treated before the polyvinyl alcohol is placed. In contrast, Applicant's claim 1 provides:

1. (Original) A fluid collector comprising an absorbent substrate coated with a saccharide, said substrate comprising a mat of glass fibers at least substantially coated with polyvinyl alcohol, said fibers defining a plurality of pores, the pores in said mat having a pore size effective to at least substantially prevent lysing of red blood cells while permitting at least substantial separation of serum from red blood cells via differential wicking.

Applicant's substrate comprises a mat of glass fibers coated with polyvinyl alcohol. The saccharide is coated on the substrate. Fitzgerald specifically teaches that one of the two needed coatings cannot be useful if the other is applied in a subsequent step. References that teach away cannot support a *prima facie* case of obviousness. *In re Geisler*, 116 F.3d 1465 (Fed. Cir. 1997). Since the *prima facie* case is not made, the rejection cannot be sustained. Every claim remaining in this application, namely, claims 1-15, 19-21, and 42, are directed to a substrate with saccharide and polyvinyl alcohol. Because none of the cited references teach or suggest a combination of saccharide and polyvinyl alcohol, and because the cited references actually teach that using both of these coatings would neither work nor lead to a useful result, there is no possible motivation or suggestion to combine the references or to teach one of ordinary skill in the art that both of these coatings could be used in tandem over glass fibers. Accordingly, the rejection is improper.

Applicant further disagrees with other portions of the *prima facie* case made by the Examiner. Numerous other structural variations have been

misread from the cited references. For example, the shaped sections 58 of the Quattrocchi reference are not holes made in a paper but are simply markings made by black biological ink on the sheet 56 (col. 7, l. 40). Applicant's claim 4 describes a blood-receiving opening to permit the access to the fluid collector. The Quattrocchi device does not have an opening to provide access to a fluid collector. The blood is placed directly on the sheet 56. From this misinterpretation of the Quattrocchi device, there is no first and second aperture, these apertures cannot be proximal, there is not a pair of fluid collectors but a single one, the fluid collector is in communication on the sheet, there are no gangs, there is no instruction separate from the device, there is no listing of a plurality of tests, no dessicant, etc.

The Commissioner is hereby authorized to charge any underpayment or credit any overpayment to Deposit Account No. 22-0259 or any payment in connection with this communication, including any fees for extension of time, that may be required. The Examiner is invited to call the undersigned if such action might expedite the prosecution of this application.

Respectfully Submitted,

Dated: March 12, 2008

By:

Alain Villeneuve
Reg. No. L-215

Vedder Price P.C.
222 N. LaSalle St., Suite 2600
Chicago, Illinois 60601-1003
(312) 609-7745